## FIELD NOTES

T. 2 N., R. 12 W., S. B. M.

N. B. Section 31 E. B. " 31 S. B. " 31 (part)

and

Closing Table of Boundaries
Section 31.

Copied from Notes loaned by Mr. L. Friel

|   | R 13 M. | R.12W.            |      | I       |
|---|---------|-------------------|------|---------|
|   | 25      | 30                | 29   |         |
|   | 363     | 311               | ³ 32 | T.2N.   |
|   | /       | <sup>3</sup><br>6 | 5    | 7. / N. |
| _ | 1       |                   |      |         |

## SUBDIVISION T. 2 N., R. 12 W. S.B.M.

Survey commenced October 14, 1909 and executed with a W. and L. E. Gurley light mountain transit with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

I begin at the corner of secs. 5, 6, 31 and 32, Tps. 1 and 2 N., R.12 W., S.B.M. which is a sycamore post 4 ins. sq. 12 ins. above ground, marked and witnessed as described by the Surveyor General. Latitude 340 12' N., Longitude 1180 10' W.

In order to test the solar apparatus by comparing the results of observations on the sun made during A. M. and P. M. hours, with a true meridian determined by observations on Polaris, I proceed as follows: At 3 hrs. Om. P.M. local mean time, I set off 340 12' N., on the Latitude arc, 80 9' S., on the declination arc and mark the meridian thus determined with the solar by a tack in a stake firmly driven in

the ground 5 chs. north of the instrument.

At 11 hrs. 48' p.m. local mean time, I observe Polaris at upper culmination, in accordanc with instructions in the manual, and mark the line thus determined by a tack driven in the stake 5 chs. north of my station.

This mark falls 0.3 ins. east of the meridian determined by the solar October 14, 1909

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October 15, 1909. At 9hrs. A.M. I set off 340 121 N. on the Latitude arc, 80 261 S. on the declination arc and mark the true position determined with the solar by a tack in the post already set 5 chs. north of my station. This mark falls 0.4 ins. east of the meridian established by the Polaris observation.

The solar apparatus by P. M. and A. M. observations defines positions for meridians about 0'16" W. and 0'21" E. of the meridian established by the Polaris observation, therefore, I conclude that the adjustments of the instrument are satisfactory. The magnetic bearing of the meridian at 9h. A.M. is N. 140 10' W.

The angle thus determined gives the Magnetic decl. 140 10' E.

After diligent search I failed to find the  $\frac{1}{4}$  sec. cor. between secs. 31 and 32. Therefore, I return to the corner of secs. 5, 6, 31 and 32, Tps. 1 and 2 N., R. 12 W., previously described. At 2 P.M. L.m.t., October 15, 1909, I set off 340 12' N. on the Lat. arc, 80 31' S. on the Decl. arc, and determine a true meridian with the solar. Thence I run

NORTH between sections 31 and 32.

Road in Arroyo Seco Canyon bears N. 80° W. and S. 80° E.

Arroyo stream in Arroyo Seco 6 lks. wide, course S. 80° E.

.75 2.90 7.00 8.30 Spur, course SW. and descend. Gulch 20 lks. wide, course SW. and ascend through dense growth of chemisal.

22.35 Summit of ridge bears NE. & SW. and descend.

27.00

Gulch 10 lks. wide, course SW. and ascend.

Set a granite stone 24x10x8 ins. 18 ins. in the ground for \( \frac{1}{4} \) sec.

corner marked \( \frac{1}{4} \) on W. face, and raise a mound of stone  $3\frac{1}{2}$  ft. base,

2 ft. high West of corner. Pits impracticable. 40.00

October 15, 1909.

42.00 Summit of ridge bears NE. & SW. and descend.

Stream in canyon 3 lks. wide, course SW. ascend over broken brushy 49,00

75.00 Descend.

Gulch 10 1ks. wide, course SE. and ascend.
Set a granite rock 18x8x6 ins. 12 ins. in the ground for corner of Secs. 29, 30, 31 and 32, marked with one notch on south and 5 notches on east edge. From which 77.00

An Oak 12 ins. dia. bears S. 62° 03' W. 207 lks. dist., marked T 2 N R 12 W S 31 B T

No other trees within limit. Pits impracticable.
Raise a mound of stone 4 ft. base, 2 ft. high, West of corner.
Land mountainous. Soil 2nd and 3rd rate. No timber.
Mountainous land covered with a dense undergrowth of Chamisal 80 che

October 20, 1909. At the corner of sections 29, 30, 31 and 32 at 2 p. M. l.m.t. I set off 340 13' N. on the Lat. arc and 100 20' S. on the Decl. arc and determined a true meridian with the solar. Thence I run

WEST on a RANDOM line between secs. 30 and 31.

Set temporary \(\frac{1}{4}\) sec. corner. October 20, 1909. Intersect W. boundary of Township 28 lks. S. of corner of secs. 25, 30, 31 and 36, T. 2 N., Rs. 11 and 12 W., which is a granite stone 10x16, 10 ins. above ground, marked and witnessed as described by the Surveyor General. Thence I run 40.00 76.36

S. 89° 47' E. on a TRUE line between secs. 30 and 31.

Descend through a dense growth of Ironwood and Chemisal.

Set a granite stone 20x8x6 ins. 15 ins. in the ground for \( \frac{1}{4} \) sec. corner marked \( \frac{1}{4} \) on N. face, from which \( \text{A Live Oak 10 ins. dia. bears N. 56 lks. dist. marked \) 36.36 A Live Oak 24 ins. dia. bears S. 56° 40' W. 103 lks. dist. marked & S 31 B T

House U. S. Forest Rangers Station bears S. 40° E.

about 5 chs. dist.

Raise a mound of stone 3 ft. base, 2 ft. high N. of corner.

Road in Arroyo Seco Canyon bears S. 40° E. and N. 40° W.

Stream in Arroyo Seco Canon 6 lks. wide, course S. 40° E.

Ascend steep rough mountain covered with a dense undergrowth 39.00 39.50 40.50

of Chemisal 62.80 76.36

Summit of ridge bears N. & S. and descend.
The corner of secs. 29, 30, 31 and 32.
Land mountainous. Soil 3rd rate. No timber.
Mountainous land covered with a dense undergrowth of brush, 76.36 chs. October 21, 1909.

As there is a misclosure in Section 31 tabled in connection with lines previously surveyed, I go to the corner of Sections 5, 6, 31 and 32, Tps. 1 and 2 N., R. 12 W. and run S. 89° 30' W. on a random line on the South boundary of Sec. 31
To 2 lks. N. of the 4 sec. corner between secs. 6 and 31, which is a granite stone 6 x 12, 8 ins. above ground, marked and witnessed as described by the Surveyor General. Thence I run

36,10

N. 89° 32' E. on a TRUE line between secs. 6 and 31.

36.10 The corner of secs. 5, 6, 31 and 32. October 22, 1909

Boundaries of Section 31, T. 2 N., R. 12 W., S. B. M.

| Line         | True<br>Bearing | Distance<br>Chains   | Latitudes          |              | Departures |               |
|--------------|-----------------|----------------------|--------------------|--------------|------------|---------------|
| Designated   |                 |                      | N.<br>ch <b>s.</b> | S.<br>chs.   | E.<br>chs. | w.<br>chs.    |
| South BDy.   | s.890321W.      | <b>3</b> 6 <b>10</b> |                    | 0.29         |            | 36 <b>10</b>  |
| do           | N.89001 W.      | 39 86                | 0.69               |              |            | <b>3</b> 9 86 |
| West Bdy.    | North           | ୪୦ ୦୪                | <b>80 0</b> 8      |              |            |               |
| North Bdy.   | s.89°47'E.      | <b>76</b> 36         |                    | 0.26         | 76 36      |               |
| East Bdy.    | South           | 80 <b>0</b> 0        |                    | 80 OO        |            |               |
| Convergency. |                 |                      |                    | 01           |            |               |
|              |                 |                      | <b>5</b> 0 77      | <b>80</b> 55 | 76 37      | <b>7</b> 5 96 |

## GENERAL DESCRIPTION

The land in this section is of but very little value for agricultural or grazing purposes. Along the bottom of the Arroyo Seco Canyon which runs through the section, and on each side of the stream are quite a number of small flats. Upon some of these flats houses have been constructed, and are occupied during the summer season by people from the valley and elsewhere.

The principal value of this section is in leasing ground for the above purposes.

Signature of Deputy,

(Signed) L. Friel